

Data Sheet

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 LTV-1

 Cat. No.
 :
 PC-45510

 CAS No.
 :
 347379-29-7

 Molecular Formula
 :
 C₂₆H₂₀N₂O₅S

 Molecular Weight
 :
 472.5124

Target : Protein Phosphatase/PTP

Solubility : 10 mM in DMSO

Biological Activity

LTV-1 is a highly potent, cell-permeable and reversible **LYP (lymphoid tyrosine phosphatase, PTPN22)** inhibitor with IC50 of 508 nM.

LTV-1 shows 3-fold selectivity over TCPTP (IC50=1.52 uM) and PTP1B (IC50=1.59 uM), 46-fold over SHP1 (IC50=23.2 uM), and 59-fold over CD45 (IC50=30.1 uM), > 200-fold over PTP-PEST (IC50 > 100 uM).

LTV-1 increases the phosphorylation levels of the direct physiological targets of LYP, augments calcium mobilization, activates the proximal IL-2 promoter, and enhances the expression of the early activation marker CD25 in T cells.

References

Vang T, et al. *Nat Chem Biol*. 2012 Mar 18;8(5):437-46.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com